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|       | Please forward sealed!  Already faxed to ZT PA  Please be sure to indicate if applicable!  I/We (first name and last name of inventor(s) - further details and signature(s) on last page)  Number |                                     | 99 E 3506     |                           |                  |
|-------|---|-------------------------------------|---------------|---------------------------|------------------|
|       |   |                                     | Number        | Date of execution:        |                  |
|       | Erich Conthan   |                                     | of inventors  | Jake of execution.        |                  |
|       |   |                                     |               | 1                         | 16.5.99          |
|       | 1   |                                     |               | '                         | 10.5.99          |
|       | give notice herewith of the inve  | ntion specified in full on the foll | owing pages   | /<br>with the title       | <br>e:           |
|       | Image originals for facilitatin   | g apparatuses                       |               |                           |                  |
| I.    | To superior of inventor(s)  | Received on:                        |               |                           |                  |
|       | Mr./Mrs./Ms. D. Dickerboom  |                                     | A&D PT1       | D1                        |                  |
|       | Please answer the following que   |                                     | (Department)  |                           |                  |
|       | a) When did you receive the not   | 18.5.99                             |               |                           |                  |
|       | b) Is the invention based on pub  | licly funded work?                  |               |                           |                  |
|       | X No Yes, project:  | ,                                   |               |                           |                  |
|       |   |                                     |               | <del>-</del>              |                  |
|       | c) Is there a corresponding in-house R&D project?  No X Yes, project: ProTool   |                                     |               | Legal term commences with |                  |
| l     |   | ProTool                             |               |                           | date of receipt! |
|       | Only for ZT-inventions:   |                                     |               |                           |                  |
|       | Project No Title:   |                                     |               | <del></del>               | Core technology: |
|       | project in the interest of Research project   | act person:                         |               |                           |                  |
|       | d) Application recommended  | □ No                                | Urgency note  |                           | <u> </u>         |
|       | Costs to be borne by (organizational un   | it):                                |               |                           |                  |
|       |   | in our field of interest. The follo |               | nente                     |                  |
| ļ     | are to be consulted:  |                                     | oming departi |                           |                  |
| ļ     |   |                                     |               |                           |                  |
|       | 06 5 00 10: 1   |                                     |               |                           |                  |
| ŀ     | 26.5.99 [Dickerbo   |                                     |               |                           |                  |
|       |   |                                     |               |                           |                  |
| - 1   | Please forward immediately on   |                                     | Received on:  |                           |                  |
|       | Siemens AG  |                                     |               |                           | ZT GG VE         |
| ľ     | ZT PA (Patent department)   |                                     |               | Ì                         | 1 June 1999      |
| -   1 | _ocation:   |                                     |               |                           |                  |
|       | (e.g.: Mch/M, Erl/S, Bln/N, kne/R, Pdb)   |                                     |               |                           | ,                |
| f     | for further action.   |                                     |               |                           | ,                |
| +     |   |                                     | <u></u>       |                           |                  |
|       |   |                                     |               |                           |                  |
| İ     |   |                                     |               | 1                         |                  |
|       |   |                                     |               |                           |                  |
|       |   |                                     |               |                           |                  |

In the context of projecting operator control and monitoring apparatuses, a requirement that is frequently imposed is that specific displays or functions be made available in all of the images. By way of example, the intention is to be able to call up a function "Indicate the starting image" in every image or to display a process value such as "Temperature" in a field. Nevertheless, it should be possible to be able to deviate from this specification in certain images.

2. How has this problem been solved up to now?

To date, this has been taken into account in that:

- Each image has been divided into two regions, of which one (the so-called permanent image) has been identical
  in all of the images. Fields placed in this region have been visible in all of the images.
- 2) For function keys (if present on the apparatus) it has been possible to project a global allocation with functions. If nothing else was projected for a key in an image, this global allocation was used. The globally projected function was thus available in all of the images. This strategy fails, of course, in the case of apparatuses which do not have any keys.
- 3. In what manner does your invention solve the technical problem indicated (show advantages)? The use of originals means that it is possible to use a uniform mechanism which is identical for keys and for fields. Even in the case of apparatuses without any keys, it is possible to project functions for all of the images in the original.
- 4. What is the inventive step?

Instead of the previous permanent image, an original image is defined, on which the images of a project are based; in other words, each image automatically contains, as preallocation, all of the fields and function key allocations of the original image.

All elements of the original are present in each image

All elements of the original are present in each image, but can be cut out

## Figure 2 Image based on original

The original elements can be individually blanked out in an image. As in the case of the permanent image, the connection to the original image is "live"; in other words, if an original element is changed, then the change is taken over in all of the images based on it.

In order to be able not only to blank image elements out of the original but also to make them visible again, it must be possible to make blanked-out elements visible as well. The user can choose whether to display only the elements associated with this image or only the original elements or both (taking account of blanked-out elements, that is to say the view as the elements appear on the apparatus). If only the original is displayed, the original elements can be edited, otherwise they cannot.

5. Exemplary embodiment(s) of the invention.

| 6. The follo | owing are enclosed for further explanation:  |
|--------------|--|
|              | sheet(s), representation of one or more exemplary embodiments of the invention; (if possible, produce drawings in the PowerPoint or Designer format) |
|              | sheet(s), additional description (e.g. laboratory reports, test records);  |
|              | sheet(s), literature describing the background art on which the invention is based *):   |
|              | _ other documentation (e.g. floppy disks, particularly with drawings of the exemplary embodiments):  |

<sup>\*)</sup> Please enclose photocopies or special reprints of all cited publications (papers in full; relevant chapter of books) with complete bibliographic data.

|     |                   |   | •   |   |  |  |  |  |
|-----|-------------------|---|---|---|--|--|--|--|
| 8   | . Has             | the in<br>No  | nvention already been tested (tests performed,  Yes, result:  | models constructed)?                        |  |  |  |  |
| 9   | . For v           | which   | products can the invention be used?   | Editors for operator interfaces             |  |  |  |  |
| 10  | . Is us           | e of t  | he invention intended?  Yes, in: ProTool CS   |   |  |  |  |  |
| 11. |                   | a prod<br>No  | duct based on the invention been delivered or i   | s delivery intended?<br>_; name of product: |  |  |  |  |
| 12. |                   | as the invention been published or is publication intended?  No  Yes, (probably) on in book, journal: |   |   |  |  |  |  |
| 13. |                   | third<br>No   | parties been notified of the invention or is such<br>Yes, (probably) on   | notification intended? to Resotec           |  |  |  |  |
| 14. | Pleas<br><b>a</b> | Diff  | e as far as possible an assessment of the follo<br>ficulty of circumvention for competitors<br>ernative solutions<br>practically not realizable<br>require effort and/or expenditure<br>realizable without problems | wing criteria:                              |  |  |  |  |
|     | b                 |   | ractiveness for competitors inpetitor interest input high average low   |   |  |  |  |  |
|     | С                 |   | of of use by competitors of of use possible without problems difficult practically impossible   |   |  |  |  |  |
|     | u                 | In-he   | ouse use (probably) yes open improbable   |   |  |  |  |  |

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| 15. Details on person of in   | ventor(s) (Enter inventors      | to 4 here. For further inver | ntors please use additional : | sheet):                     |  |
|---|---------------------------------|------------------------------|-------------------------------|-----------------------------|--|
| Name  | Günther                         |                              |                               |                             |  |
| Last name   |                                 |                              |                               | ·                           |  |
| First name  | Erich                           |                              |                               |                             |  |
| APD/Personnel No. *)  | 531/R01374                      |                              |                               |                             |  |
| Is this your first notification of invention to ZT PA?  | Yes ⊠ □ No                      | Yes 🗌 🔲 No                   | Yes 🗌 🔲 No                    | Yes 🗌 No                    |  |
| Degree/title/profession   | Dipl. Inf                       |                              |                               |                             |  |
| At time of invention: student/<br>postgraduate student  | Yes please enclose contract     | Yes please enclose contract  | Yes please enclose contract   | Yes please enclose contract |  |
| Post/position in company (e.g. laboratory supervisor)   |                                 |                              | 1                             |                             |  |
| Employer if not Siemens AG  |                                 |                              |                               |                             |  |
| Division  | A&D                             |                              |                               |                             |  |
| Department  | PT1 D1                          |                              |                               |                             |  |
| Location  | WKF                             |                              |                               |                             |  |
| Telephone (office number)   | 0911 750 9513                   |                              |                               |                             |  |
| Fax (office number)   | ·                               |                              |                               |                             |  |
| E-Mail  | Erich.Guenther@fthw. siemens.de |                              |                               |                             |  |
| Nationality<br>(if not German)  |                                 |                              |                               |                             |  |
| Private address:<br>Street, House No.   | langer Platz 13a                |                              |                               |                             |  |
| Zip/Postal code, Town   | 91074<br>Herzogenaurach         |                              |                               |                             |  |
| Date of birth   | 18.9.61                         |                              |                               |                             |  |
| 16. Is the invention a) in your field of work?  | ⊠ Yes □ No                      | ☐ Yes ☐ No                   | □Yes □No                      | ☐ Yes ☐ No                  |  |
| b) in another field of work of your employer?   | □ Yes □ No                      | □ Yes □ No                   | ☐ Yes ☐ No                    | ☐ Yes ☐ No                  |  |
| 17. What is your share of the invention in percent?   | %                               | %                            | %                             | %                           |  |
| 18. Invention submitted for<br>improvement award scheme?  | ☐ Yes                           | ☐ Yes ☐ No                   | □Yes □No                      | ☐ Yes ☐ No                  |  |
| <ol> <li>If you are of the opinion<br/>that employer has no<br/>claim to invention, please<br/>substantiate:</li> </ol> |                                 |                              |                               |                             |  |
| 20. To the best of my/our knowledge no further persons participated in invention.                                       |                                 |                              |                               |                             |  |
|   | (Signature)                     | (Signature)                  | (Signature)                   | (Signature)                 |  |

 $<sup>^{\</sup>star}$ ) Please see company identity card or pay slip.